

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

February 2003

BUDGET ACTIVITY

07 - Operational System Development

PE NUMBER AND TITLE

0207138F F-22 SQUADRONS

PROJECT

4785

COST (\$ in Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
4785 F-22	0	66,323	315,784	375,428	411,671	640,691	612,655	561,324	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0

(U) **A. Mission Description**

The F/A-22 is designed to penetrate enemy airspace and achieve a first look, first kill capability against multiple targets. The F/A-22 is characterized by a low observable, highly maneuverable airframe, advanced integrated avionics, and aerodynamic performance that allows supersonic cruise without the use of afterburner. The F/A-22 is currently in the Engineering and Manufacturing Development (EMD) phase of acquisition. The Defense Acquisition Board (DAB) approved Low Rate Initial Production (LRIP) Aug 01. This exhibit is for post EMD requirements/developments - which includes hardware and software enhancements to the EMD baseline. These enhancements will upgrade the F/A-22 to enable a more robust air-to-ground target engagement capability.

This program is in Budget Activity 7, Operational System Development, because the F/A-22 Program is developing the next-generation air dominance fighter for the USAF to counter emerging worldwide threats.

(U) **FY 2002 (\$ in Thousands)**

(U) \$0 Accomplishment/Planned Program
 (U) \$0 No activity
 (U) \$0 Total

(U) **FY 2003 (\$ in Thousands)**

(U) \$0 Accomplishment/Planned Program
 (U) \$60,196 Initiate requirements definition and spiral development activities for planned hardware and software capability upgrades. (NSP)
 --Initiate Spiral 2 to develop Global Strike Task Force basic capabilities.
 --Initiate Spiral 3 to develop Global Strike Task Force enhanced capabilities.
 (U) \$3,627 Initiate Air Vehicle Instrumentation support (SEEK EAGLE Instrumentation).
 (U) \$2,500 Initiate Post-EMD System Engineering/Program Management Contract Support
 (U) \$66,323 Total

Project 4785

Page 1 of 6 Pages

Exhibit R-2 (PE 0207138F)

1261

UNCLASSIFIED

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

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(U) **A. Mission Description Continued**(U) **FY 2004 (\$ in Thousands)**

(U)	\$0	Accomplishment/Planned Program
(U)	\$231,014	Continue spiral development activities for planned hardware and software capability upgrades. (NSP)
		--Continue Spiral 2 to develop Global Strike Task Force basic capabilities.
		--Continue Spiral 3 to develop Global Strike Task Force enhanced capabilities.
(U)	\$19,000	Continue Air Vehicle Instrumentation support (SEEK EAGLE Instrumentation).
(U)	\$6,270	Initiate Air Vehicle Instrumentation support (Test Instrumentation)
(U)	\$5,000	Continue spiral development Post-EMD System Engineering/Program Management Contract Support.
(U)	\$51,000	Continue flight test and flight test support at Edwards AFB. (NSP)
(U)	\$3,500	Mission support of the SPO; travel, computer costs, misc contracts, etc.
(U)	\$315,784	Total

(U) **B. Budget Activity Justification**

This program is in Budget Activity 7, Operational System Development, because the F/A-22 Program is developing the next-generation air dominance fighter for the USAF to counter emerging worldwide threats.

(U) **C. Program Change Summary (\$ in Thousands)**

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>Total Cost</u>
(U) Previous President's Budget	0	181,239	227,296	TBD
(U) Appropriated Value	0	181,239		0
(U) Adjustments to Appropriated Value				
a. Congressional/General Reductions		-1,916		-1,916
b. Small Business Innovative Research				0
c. Omnibus or Other Above Threshold Reprogram		-113,000		-113,000
d. Below Threshold Reprogram				0
e. Rescissions				0
(U) Adjustments to Budget Years Since FY 2003 PBR			88,488	88,488
(U) Current Budget Submit/FY 2004 PBR	0	66,323	315,784	TBD

Project 4785

Page 2 of 6 Pages

Exhibit R-2 (PE 0207138F)

1262

UNCLASSIFIED

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

February 2003

BUDGET ACTIVITY

07 - Operational System Development

PE NUMBER AND TITLE

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4785

(U) **C. Program Change Summary (\$ in Thousands) Continued**(U) **Significant Program Changes:**

Modernization Acquisition Strategy was changed from block to spiral development to reflect the F/A-22 Program's Global Strike Task Force requirements.

EMD budget was increased in FY03 and FY04 to fund the increase in EMD Estimate at Completion. The already submitted Above Threshold Reprogramming for FY03 reprograms FY03 RDT&E Modernization funds (PE 27138F) and Production funds (PE 27218F) to complete this action. For FY04, USAF internally funded the EMD increase within F/A-22 Total Obligation Authority (TOA) by realigning F/A-22 Production funds (PE 27119F).

Additional funding (FY04) for Spiral development to support enhanced GSTF capabilities.

All Auto Ground Collision Avoidance System (AGCAS) funding in FY04 and out was removed.

(U) **D. Other Program Funding Summary (\$ in Thousands)**

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) AF RDT&E	728,403	839,635	620,740	210,000	76,000					24,085,499
(U) {PE 64239F}										
(U) PRTV II (6)	148,870									1,580,580
(U) F/A-22 Squadrons Procurement (PE 0207138F)		16,027	41,276	71,691	10,100	76,586	134,697	167,108	Continuing	TBD
(U) Military Construction (PE 0604239F)	0	0	0	0	0	0	0	0	0	39,700
(U) Military Construction (PE 0207219F)	53,442	42,790	0	0	0	0	0	0	0	96,232
(U) Military Construction (PE 0207138F)			31,164	40,246	60,070	96,030	148,700	93,090	Continuing	TBD
(U) Aircraft Procurement (PE 0207219F) Advanced Tactical Fighter, P-1 Line Item #003**	3,022,659	4,470,117	4,220,552	4,456,732	4,133,179	4,224,841	4,088,173	3,910,350	5,899,334	42,120,631

Project 4785

Page 3 of 6 Pages

Exhibit R-2 (PE 0207138F)

1263

UNCLASSIFIED

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

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February 2003

BUDGET ACTIVITY

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0207138F F-22 SQUADRONS

4785

(U) **D. Other Program Funding Summary (\$ in Thousands)**

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) Munitions Procurement (PE 0207219F)	4,311	6,260	9,480	9,433	10,922	10,771	12,027	12,253	24,726	102,057
(U) F/A-22 Link 16 Transmit Procurement (PE 27445F)					26,483	27,541	31,971	32,518	127,270	245,783

**NOTE: Includes BP10, 11, 16, 19 and Advance Buy.

(U) **E. Acquisition Strategy**

Delivery Order on Raptor Enhancement Development Integration (REDI) Contract to accomplish requirement definition and spiral development activities. Planned development and test will be on a separate delivery order to be executed in the FY05 and beyond timeframe.

(U) **F. Schedule Profile**

	<u>FY 2002</u>				<u>FY 2003</u>				<u>FY 2004</u>			
	1	2	3	4	1	2	3	4	1	2	3	4
(U) Initiate Spiral development activities for planned upgrades							X					
(U) Initiate Air Vehicle Instrumentation support (SEEK EAGLE Instr.)							X					
(U) Initiate Air Vehicle Instrumentation support (Test Instrumentation)										X		
(U) Initiate Post-EMD System Engnrg/Program Management contract support							X					
(U) Initiate Other Government Costs							X					

* - Completed
X - Planned

Project 4785

Page 4 of 6 Pages

Exhibit R-2 (PE 0207138F)

1264

UNCLASSIFIED

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2003			
BUDGET ACTIVITY					PE NUMBER AND TITLE			PROJECT		
07 - Operational System Development					0207138F F-22 SQUADRONS			4785		
(U) <u>A. Project Cost Breakdown (\$ in Thousands)</u>										
					<u>FY 2002</u>			<u>FY 2003</u>		
(U) Initiate spiral development activities for planned hardware and software capability upgrades.								60,196		
(U) Air Vehicle Instrumentation support (SEEK EAGLE Instr.)								3,627		
(U) Air Vehicle Instrumentation support (Test Instr.)								0		
(U) Post-EMD System Engineering/Program Management contract support								2,500		
(U) Other Government Costs										
(U) - Government Test										
(U) - Mission Support										
(U) Total								66,323		
(U) <u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u>										
(U) <u>Performing Organizations:</u>										
<u>Contractor or</u>	<u>Contract</u>									
<u>Government</u>	<u>Method/Type</u>	<u>Award or</u>	<u>Performing</u>	<u>Project</u>						
<u>Performing</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Activity</u>	<u>Office</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Activity</u>	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>	<u>to FY 2002</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>Complete</u>	<u>Program</u>
<u>Product Development Organizations</u>										
Spiral development activities	Cost Plus	3QFY03				60,196	231,014	Continuing		TBD
Air Vehicle Instrumentation support (SEEK EAGLE Instr)	Cost Plus	3QFY03				3,627	19,000	Continuing		TBD
Air Vehicle Instrumentation support (Test Instrumentation)	Cost Plus	3QFY03				0	6,270	Continuing		TBD
System Engineering / Program Management	Cost Plus					2,500	5,000	Continuing		TBD
<u>Support and Management Organizations</u>										
Support Contracts								1,300	Continuing	TBD
In House Support								2,200	Continuing	TBD

Project 4785

Page 5 of 6 Pages

Exhibit R-3 (PE 0207138F)

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2003			
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT		
07 - Operational System Development				0207138F F-22 SQUADRONS				4785		
(U) <u>Performing Organizations Continued:</u>										
<u>Test and Evaluation Organizations</u>										
AFFTC							51,000	Continuing	TBD	
(U) <u>Government Furnished Property:</u>										
<u>Contract</u>										
<u>Method/Type</u>										
<u>Award or</u>										
<u>Obligation</u>										
<u>Delivery</u>										
<u>Total Prior</u>										
<u>Budget</u>										
<u>Budget</u>										
<u>Budget</u>										
<u>Budget to</u>										
<u>Total</u>										
<u>Description</u>										
<u>Vehicle</u>										
<u>Date</u>										
<u>Date</u>										
<u>to FY 2002</u>										
<u>FY 2002</u>										
<u>FY 2003</u>										
<u>FY 2004</u>										
<u>Complete</u>										
<u>Program</u>										
<u>Product Development Property</u>										
Not Applicable										
<u>Support and Management Property</u>										
Not Applicable										
<u>Test and Evaluation Property</u>										
Not Applicable										
<u>Subtotals</u>										
<u>to FY 2002</u>										
<u>FY 2002</u>										
<u>FY 2003</u>										
<u>FY 2004</u>										
<u>Complete</u>										
<u>Program</u>										
Subtotal Product Development										
66,323										
261,284										
TBD										
TBD										
Subtotal Support and Management										
3,500										
TBD										
TBD										
Subtotal Test and Evaluation										
51,000										
TBD										
TBD										
Total Project										
66,323										
315,784										
TBD										
TBD										

Project 4785

Page 6 of 6 Pages

Exhibit R-3 (PE 0207138F)